



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/573,247

04/02/2007

Reed Gamble

330499.00050

3023

27160 7590 05/10/2011  
KATTEN MUCHIN ROSENMAN LLP  
(C/O PATENT ADMINISTRATOR)  
2900 K STREET NW, SUITE 200  
WASHINGTON, DC 20007-5118

EXAMINER

KARPINSKI, LUKE E

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

05/10/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,247	<b>Applicant(s)</b> GAMBLE, REED	
	<b>Examiner</b> LUKE KARPINSKI	<b>Art Unit</b> 1616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,10-12,16-23,25,26,28,30-36,38,39 and 42-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,10-12,16-23,25,26,28,30-36,38,39, and 42-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claims***

Claims 3, 6-9, 13-15, 24, 27, 29, 37, 40, and 41 are canceled.

Claims 1, 2, 4, 5, 10-12, 16-23, 25, 26, 28, 30-36, 38, 39, and 42-45 are pending and under consideration in this action.

### ***Rejections***

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.

Art Unit: 1616

3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**1. Claims 1, 2, 4, 5, 10-12, 16-20, 22, 23, 25, 28, 30, 31, 39, and 42-45 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin in view of USPN 6,037,280 to Edwards et al.

### ***Applicant Claims***

Applicant claims a patch comprising an adhesive layer and a material layer comprising one or more UVA and UVB agents providing a SPF of 15 or greater and wherein said patch is transparent.

Applicant further claims a SPF of 40, said UV agents on the surface of said material layer, UV agents within the adhesive layer, specific UV agents, specific adhesive application patterns, a layer for protecting said adhesive layer, said material layer as a fabric, tape, or film, shapes for said patch, said patch as waterproof, methods of manufacturing said patch comprising bringing an adhesive layer in contact with a material layer, and application of said patch to moles on the skin.

### ***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Muchin teaches dermatological patches comprising an adhesive layer and a pad, which reads on said material layer, wherein said patch may be transparent (abstract). additives applied to the adhesive layer or the pad (col. 6, lines 13-19), optional

Art Unit: 1616

ingredients including UV absorbers, which reads on said additives (col. 5, line 48 to col. 6, line 1), zinc oxide from 0.01-500 microns (col. 4, lines 34-56), which reads on a UVA and UVB absorber, application of said adhesive to said pad (col. 4, lines 27-29), as pertaining to claims 1, 25, 28, 30, and 39, and application of said patches to the skin as pertaining to claim 30.

Muchin further teaches said additives, which includes said UV agents, applied to said pad (col. 6, lines 13-14), which reads on the surface as pertaining to claim 11, zinc oxide reads on claim 12, said adhesive layer not applied to the entire pad (col. 3, lines 45-50), as pertaining to claim 16, a liner applied to said adhesive pad (col. 7, lines 45-61), as pertaining to claims 17 and 18, said pad comprising any suitable substrate material including nylon cloth (col. 2, line 60 to col. 3, line 2) or a film (col. 3, line 22), which reads on the fabric of claim 19 and film of claim 20, and said patch as circular (col. 7, lines 24-27), as pertaining to claim 22.

***Ascertainment of the Difference between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Muchin does not teach an SPF of 15-40 as claimed in claims 1, 4, 5, 31, 39, 42, and 43. This deficiency in Muchin is cured by Edwards et al. Edwards et al. teach textiles containing UV agents and having an SPF of over 25 (col. 2).

Further, Muchin does not teach said UV agent within the interstitial spaces of the material layer as claimed in claim 10. This deficiency is cured by Edwards et al.

Art Unit: 1616

Edwards et al. teach said UV agents may be attached to the surface or interstitial spaces of said fabric (col. 2, lines 56-60).

***Finding of Prima Facie Obviousness Rational and Motivation***

***(MPEP §2142-2143)***

Regarding the SPF of said patches, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin with any desired SPF as taught by Edwards et al. in order to produce the invention of instant claims 1, 4, 5, 31, 39, 42, and 43.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches patches comprising UV agents within the adhesive and material layer, which may be a fabric, and Edwards et al. teach types of fabric comprising UV agents and having a SPF of 25 or greater. Therefore it would have been obvious to utilize the known SPF range of Edwards et al., in the patches of Muchin in order to produce a fabric backing layer with a desired SPF. Further, one of ordinary skill in the art is well aware that a modification of the amount or type of UV agent will result in a modification of the SPF value and one of ordinary skill in the art would have been capable of said modification to the desired value.

Regarding said UV agents being found within the interstitial spaces of the material layer, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce a backing material with said UV agents

Art Unit: 1616

attached to the surface or within the interstitial spaces thereof in order to produce the invention of instant claim 10.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches patches comprising UV agents within the material layer, which may be a fabric, and Edwards et al. teach types of fabric comprising UV agents attached to the surface or within the interstitial spaces thereof. Therefore it would have been obvious to incorporate said UV agents onto or within a material layer as taught by Edwards et al., in the patches of Muchin in order to produce a fabric backing layer having UV agents attached in a known manner.

Regarding the limitation of said second layer being opaque to UV radiation, said second layer having UV agents incorporated therein would inherently be opaque to UV radiation.

Regarding the limitation of said adhesive on the peripheral edge of said patch, Muchin et al. teach that the entire surface of said patch does not require coverage with said adhesive and one of ordinary skill would have been more than capable of choosing the design application of said adhesive to the periphery of said patch to ensure proper adhesion while reducing the required amount of adhesive.

Regarding said patch as waterproof, the combined patches of Muchin and Edwards et al. comprise all of the same components as the claimed patches and therefore would also possess all of the same properties, including being waterproof.

Regarding the limitations of said patch applied to a specifically susceptible area of skin or to a mole, the patches of Muchin are for application to any area of the skin, as

Art Unit: 1616

are the patches of Edwards et al., it would have been obvious to apply said patches to skin having a mole.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**2. Claims 33-36 and 38 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of US/2003/0175328 to Shefer et al.

### ***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims specific UV agents.

### ***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches the incorporation of UV agents, including zinc oxide, to patches and Edwards et al. teach the incorporation of UV agents to textiles.



***Ascertainment of the Difference between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach the specific UV agents as claimed in claims 33-36 and 38. This deficiency in the combination of art is cured by Shefer et al. Shefer et al. teach patches comprising sunscreens [23], including octylmethoxycinnamate, oxybenzone, and ethyl hydroxypropyl aminobenzoate [35].

***Finding of Prima Facie Obviousness Rational and Motivation  
(MPEP §2142-2143)***

Regarding claims 33-36 and 38, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin and Edwards et al. with octylmethoxycinnamate, oxybenzone, and/or ethyl hydroxypropyl aminobenzoate as taught by Shefer et al. in order to produce the invention of instant claims 33-36 and 38.

One of ordinary skill in the art would have been motivated to do this because Muchin and Shefer et al. are both drawn to patches comprising sunscreen agents and Shefer et al. teaches specific agents known to be used in patch formulations. Therefore it would have been obvious to utilize the UV agents of Shefer et al., in the patches of combined references Muchin and Edwards et al. in order to produce a patch with UV agents known to be used in patches.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed

Art Unit: 1616

invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**3. Claims 21 and 26 are rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of USPN 5,167,649 to Zook.

### ***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims said material layer as a gel type.

### ***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches that any suitable pad material is usable (col. 2, lines 60-64).

### ***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach a gel pad material as claimed in claims 21 and 26. This deficiency in the combination of art is cured by Zook. Zook teaches transparent transdermal gel patches (abstract).

***Finding of Prima Facie Obviousness Rational and Motivation***  
***(MPEP §2142-2143)***

Regarding claims 21 and 26, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin and Edwards et al. with a gel pad as taught by Zook in order to produce the invention of instant claims 21 and 26.

One of ordinary skill in the art would have been motivated to do this because Muchin teaches that any suitable pad material may be used and Zook teaches that transparent gel patches are known. Therefore it would have been obvious to utilize the gel patch of Zook, in the patches of Muchin in order to produce a patch with a different known backing material.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**4. Claim 32 is rejected under 35 U.S.C. 103(a)** as being unpatentable over USPN 6,241,998 to Muchin and USPN 6,037,280 to Edwards et al. as applied to claims 1 and 12 above in further view of USPN 6,103,275 to Seitz et al.

Art Unit: 1616

***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims PABA as said UV agent.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Muchin and Edwards et al. are delineated above and incorporated herein. In particular Muchin teaches the incorporation of UV agents.

***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Neither Muchin nor Edwards et al. teach PABA as claimed in claim 32. This deficiency in Muchin is cured by Seitz et al. Seitz et al. teach two gels which may be applied as a transdermal patch (col. 3, lines 35-41) and that said formulations may comprises sunscreen agents including PABA (col. 6, lines 15-20).

***Finding of Prima Facie Obviousness Rational and Motivation***

***(MPEP §2142-2143)***

Regarding claim 32, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the patches of Muchin with PABA as taught by Seitz et al. in order to produce the invention of instant claim 32.

One of ordinary skill in the art would have been motivated to do this because Muchin and Seitz et al. both teach patches comprising UV agents and Seitz et al. teach

Art Unit: 1616

that PABA is a UV agent known to be used in patches. Therefore it would have been obvious to utilize the PABA of Seitz et al., in the patches of Muchin in order to use a UV agent known to be used in other patch formulations.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Response to Arguments***

Applicant's arguments filed 3/16/2011 have been fully considered but they are not persuasive.

Applicant argues that the patches of Muchin are not designed to be kept on the skin for a prolonged period of time as the instant patches are.

This argument is not found persuasive because application for a different amount of time is considered an intended use. The patches of Muchin are capable of remaining on the skin for an extended period of time absent any evidence to the contrary.

Applicant also argues that Muchin and Edwards et al. are not compatible documents.

This argument is not found persuasive because Muchin teaches using fabrics as a backing material with UV agents on them and Edwards et al. is drawn to different fabrics used in combination with different UV agents.

Art Unit: 1616

Applicant also argues that it is absurd to suggest that it would be desirable or practical to have an item of clothing that is transparent.

This argument is not found persuasive because this is applicant's opinion only. Practical or not, transparent clothing is well known.

Applicant also argues that the zinc oxide in the patches of Muchin would not have any effect on UV absorption due to limited application time.

This argument is not found persuasive because the patches of Muchin are the same as those claimed and application for any period of time would reduce UV exposure.

Applicant also argues that one desiring to prevent UV penetration would not look to Muchin for guidance.

This argument is not found persuasive because this is an intended use and such limitations are given limited, if any weight in product claims. As to the method claims, Muchin teaches application of said patches to the skin which would necessarily reduce exposure to UV radiation. Muchin teach the same patches as claimed and the same method steps as claimed.

Applicant also argues that it is unrealistic that Edwards provides any incentive toward a transparent patch.

This argument is not found persuasive because Edwards is used for the teaching of UV agents that may be used in combination with fabrics. Muchin suggests the manufacture of a transparent patch (abstract).

Applicant also argues that the office action mailed 12/16/2010 provides no reason why one would provide a SPF to the patch of Muchin.

This argument is not found persuasive because Muchin is not required to provide a reason to impart a SPF to said patches for a showing of obviousness because Muchin teaches the inclusion of UV agents into said patch (col. 4 and col. 6).

***Affidavit under 37 C.F.R 1.132***

The affidavit under 37 CFR 1.132 filed 3/16/2011 is insufficient to overcome the rejection of record based upon the above provided obviousness rejection as set forth in the last Office action because: the affidavit argues that the patches of Muchin would not have any effect on the prevention of UV exposure due to the short application time and ones home having low levels of UV light.

This argument is not found persuasive because the patches of Muchin are the same as those claimed and would necessarily provide protection from UV exposure no matter the application time or UV levels. Further, the patches of Muchin may be applied outside and left on as long as desired.

The affidavit also argues that one would not look to Muchin for guidance on preventing UV penetration to a mole.

This argument is not found persuasive because Muchin teach the same patches as claimed and application of said patches to the skin. Further there are no claims to limit application to a mole.

Art Unit: 1616

The affidavit also argues that Edwards does not provide incentive for a transparent patch.

This argument is not found persuasive because Muchin teach said patches as transparent (abstract) and Edwards is used to teach the use of different UV agents with fabrics.

### ***Conclusion***

Claims 1, 2, 4, 5, 10-12, 16-23, 25, 26, 28, 30-36, 38, 39, and 42-45 are rejected.

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUKE KARPINSKI whose telephone number is (571)270-3501. The examiner can normally be reached on Monday Friday 9-5 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEK

/Johann R. Richter/

Application/Control Number: 10/573,247

Page 17

Art Unit: 1616

Supervisory Patent Examiner, Art Unit 1616